

# **AGS/Booster PP Status**

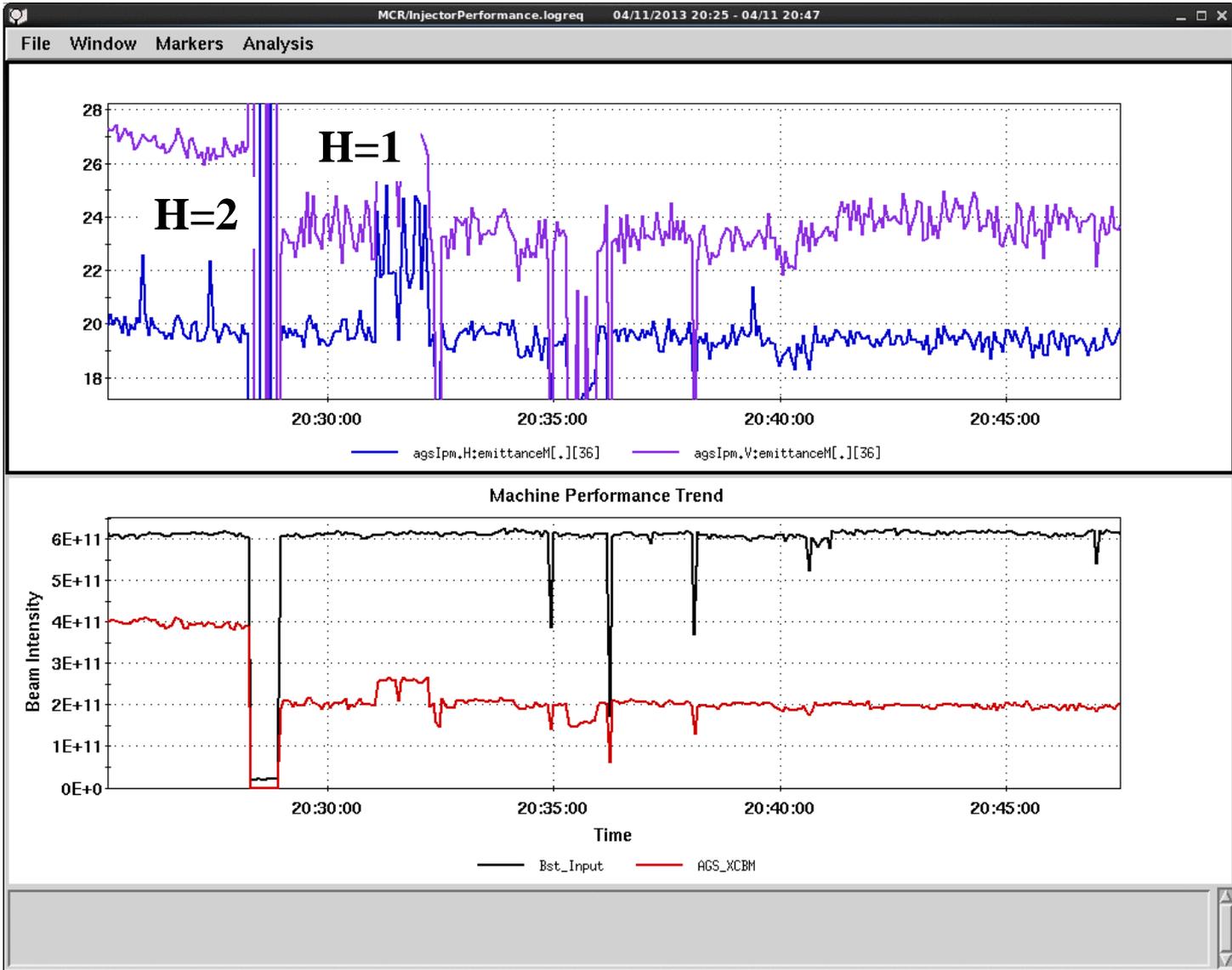
Haixin Huang

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Time Meeting

# Status

- Pulse power supply group fixed G10. Improved the AtR efficiency after April 8.
- AGS continued to provide near 70% polarization for RHIC injection.
- The Booster  $h=2$  was tested in the Booster with higher bunch intensity (near  $2 \times 10^{11}$ ,  $6 \times 10^{11}$  Booster input ). Lower polarization with  $h=2$  ( $66.2 \pm 0.9$ ) than  $h=1$  ( $71.4 \pm 1.1$ ), as we sacrificed on the vertical scraping in the Booster. Vertical emittance is about 10% higher in  $h=2$  case, but no difference seen in horizontal. Longitudinal emittance is reduced from  $1.04 \text{ eV-s}$  to  $0.77 \text{ eV-s}$ .
- Longitudinal emittance increased from  $.63 \text{ eV-s}$  to  $1.04 \text{ eV-s}$  on the ramp. RF group removed the bunch oscillation at injection. Keith tuned transition jump.
- With modest quad pumping, the bunch length at AGS extraction can be reduced to  $23.7 \text{ ns}$  from  $29 \text{ ns}$ . We will try that for next RHIC fill.
- There is a plan to do  $2.5 \text{ GeV}$  setup next week (after NSRL operation during day).

# AGS Flattop Remittance for h=2 and h=1



AGS bunch intensity was  $2 \cdot 10^{11}$ . Different scraping in the Booster. Vertical remittance is larger with  $h=2$ .